Use of an open-access gastroscopy service by a general practice: findings and subsequent specialist referral rate

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SUMMARY. An analysis of 102 open-access gastroscopy requests from one general practice over 38 months showed that the detection rate of abnormalities was 58%. Even though no predetermined investigation criteria were used these results compare favourably with gastroscopy findings generally and are superior to the detection rate of lesions using barium meals. Only 12% of the patients who underwent gastroscopy required subsequent referral to a consultant. This represents a major benefit, hitherto undocumented, of an open-access gastroscopy service. Considerations of accuracy, safety and cost effectiveness coupled with the availability of efficacious drugs appear to favour the case for open-access gastroscopy for general practitioners.

Introduction

IN spite of many reports on open-access gastroscopy services the views of general practitioners on the subject have not been clearly stated. Specialist units have expressed concern that such a service may lead to diminishing returns by lowering the 'referral threshold' and that tighter referral criteria may be necessary.[1] However, there has been no measurement of the eventual hospital referral rate following gastroscopy when the patients' management has remained with the referring practitioner. This study is an attempt to determine the findings and specialist referral rate following the use of an open-access gastroscopy service by one general practice.

Method

The case histories of gastroscopy requests over 38 months from a practice in the north of England which had been granted open access were analysed three months after the last gastroscopy. The practice has three partners and a list of 6400 patients.

No predetermined referral criteria were used. Gastroscopy was requested in place of radiology for diagnosis, treatment assessment and surveillance of lesions when warranted. Where biopsies were taken in mucosal lesions the results were classed as equivocal if the histology differed from the gastroscopy appearances. All the results were passed directly to the referring doctor. Patient management remained the responsibility of the referring doctor and specialist referral was made only when it was felt useful or necessary.

Results

Over the 38-month period 102 gastroscopies were requested (68 for men and 34 for women) in 94 patients, eight being repeat examinations. The practice referral rate for gastroscopy was therefore 5.0 per 1000 patients per year. The mean age of the men was 46 years (range 18–72 years) and of the women 48 years (range 28–74 years). Each of the doctors' requests were made directly to the Gastrointestinal Unit at Middlesbrough General Hospital where the author (one of the partners) worked as a clinical assistant. The maximum waiting time was two weeks.

The gastroscopy findings and the distribution of requests between the three partners are shown in Table 1. The overall detection rate of abnormal findings was 58% and of unequivocal abnormalities (that is excluding duodenal and gastric inflammation) 33%. There was no significant difference between the detection rates of the three partners despite the author's special interest in gastroenterology: 59% for Dr A, 50% for Dr B and 64% for the author. Biopsies were taken in 71% of mucosal lesions.

Only 11 of the 94 patients who underwent gastroscopy (12%) required subsequent referral to a specialist. Four of them required surgery (three for pyloric stenosis, one for a persistent gastric ulcer), five received long-term treatment with H_2-receptor blockers, one had troublesome gallstones, and one continued to suffer symptoms despite upper gastrointestinal treatment and is now thought to have irritable bowel syndrome.

Table 1. Findings from 102 gastroscopies performed in 94 patients and the distribution of requests between the three partners. Several patients had more than one finding.

Finding	Number of patients			Total number (%) of patients ($n = 94$)		Number of repeat examinations
	Dr A ($n = 29$)	Dr B ($n = 26$)	Author ($n = 39$)			
Hiatus hernia	4	1	4	9	(*9.6*)	–
Oesophagitis	2	2	7	11	(*11.7*)	–
Gastric/pyloric inflammation	6	3	10	19	(*20.2*)	–
Gastric ulcer	0	2	0	2	(*2.1*)	–
Pyloric stenosis	0	4	6	4	(*4.3*)	6
Duodenal inflammation	4	5	4	13	(*13.8*)	–
Duodenal ulcer	4	3	8	14	(*14.9*)	1
Carcinoma	0	0	0	0	(*0*)	–
Equivocal	1	4	4	9	(*9.6*)	–
Normal	12	8	10	29	(*30.9*)	1

n = number of patients for whom gastroscopy requested.

Discussion

The third national morbidity study shows the incidence of oesophageal, gastric and duodenal problems to be 17 per 1000 patients per year and the consultation rate for these problems to be 41.1 per 1000 patients per year.[2] On the basis of the referral rate for gastroscopy found in this study each gastroscopy referral was associated with eight consultations or with one in three of all new presentations of this symptom complex.

The detection rate of abnormal findings found here (58%) compares favourably with rates from open-access barium meal examinations and with the gastroscopy findings of others.[3] The detection rate of major abnormalities using barium meal examinations is probably less than 25%[4] whereas in this study the

detection rate of unequivocal abnormalities was 33%.

A notable finding was the relatively high percentage of patients with gastric, pyloric or duodenal inflammation (34%) (Table 1). The recognition of these mucosal lesions improved the doctors' insight into the plight of patients whose problems often go undetected by radiology and helped to direct their management. These findings together with apparently negative findings may take on increased importance in the light of recent work suggesting a link between *Campylobacter pyloridis* organisms and gastritis and peptic ulceration.[5]

The results of this study strongly support the principle of open-access gastroscopy. The most notable finding is that 88% of the patients examined remained under general practitioner management and did not require subsequent specialist referral. Although it could be argued that many of the patients could equally well have had a barium meal examination, it is likely that a significant number would have required a subsequent gastroscopy. As many lesions may be missed by radiology the choice of investigation seems clear, especially as the costs of the two types of examination are comparable, excluding overheads,[3] which are lower for gastroscopy. Diagnostic gastroscopy, that is where therapeutic procedures such as stricture dilatations are not performed, is safe and well-tolerated.

In conclusion, I believe it is possible to achieve competitive results from an open-access service without using rigid referral criteria, and that one unrealized secondary benefit of this service is the low subsequent referral rate to specialist clinics. High patient expectation and common knowledge of modern ulcer-healing drugs has increased pressure on general practitioners to treat gastric problems quickly and effectively, strengthening the case for open-access gastroscopy.

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Acknowledgements

I thank my partners Drs Timothy O'Callaghan and David Leech and Mr Michael Cooke of Middlesbrough General Hospital.

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Corrigendum

In a paper in the February *Journal* — 'Non-specific (anaerobic) vaginitis: relevance of clinical and laboratory studies in a practice population' — Dr A.M. Bangham was incorrectly described as a general practitioner in Barnet. Dr A.M. Bangham is a Senior Clinic Medical Officer in the Barnet District Health Authority.

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